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10/003,370	11/15/2001	Hamid S. Abroy	LEX-80	4701

7590 07/14/2003

SQUARE D COMPANY
1415 South Roselle Road
Palatine, IL 60067

EXAMINER

FITZGERALD, JOHN P

ART UNIT

PAPER NUMBER

3637

DATE MAILED: 07/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,370

Applicant(s)

ABROY, HAMID S.

Examiner

John P Fitzgerald

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In view of applicant's amendment filed 21 April 2003, rejection of claims 1 and 5 under 35 U.S.C. § 112 first and second paragraphs are withdrawn.

Claim Rejections - 35 USC § 102

2. Claim 6 is rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Uchida et al. Uchida et al. disclose an integrally molded apparatus (14) (Figs. 1-9), the apparatus having a first wall (14a); a second wall (14a) secured in spaced relation to the first wall; a first slot (S1) formed in the first wall and opening toward the second wall; a second slot (S2) formed in the second wall and opening toward the first wall; a back stop member (C) secured in spaced relation to the first wall; a locking member (21g) secured in spaced relation to the first wall; an arc plate (2) in slidable communication with the first slot and the second slot; whereby the arc plate is secured by the first slot, the second slot, the backstop member and the locking member. Uchida et al. further disclose an additional embodiment having resilient stop members (21c) (Figs. 12A-12D) with tabs (21f) engaging the first end of the arc plates, fixing them in place.

3. Claims 12 and 13 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Uchida et al. Uchida et al. disclose an apparatus for quenching an arc (14) (Fig. 2), the apparatus having an arc stack housing (14); an arc plate (2) (Fig. 5); and a means (2c) for securing the arc plate in the arc housing; the means preventing the arc plate from vibrating in the arc stack

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housing due to the alternating magnetic field caused by current flowing through the circuit breaker (Uchida et al.: col. 7, lines 33-44).

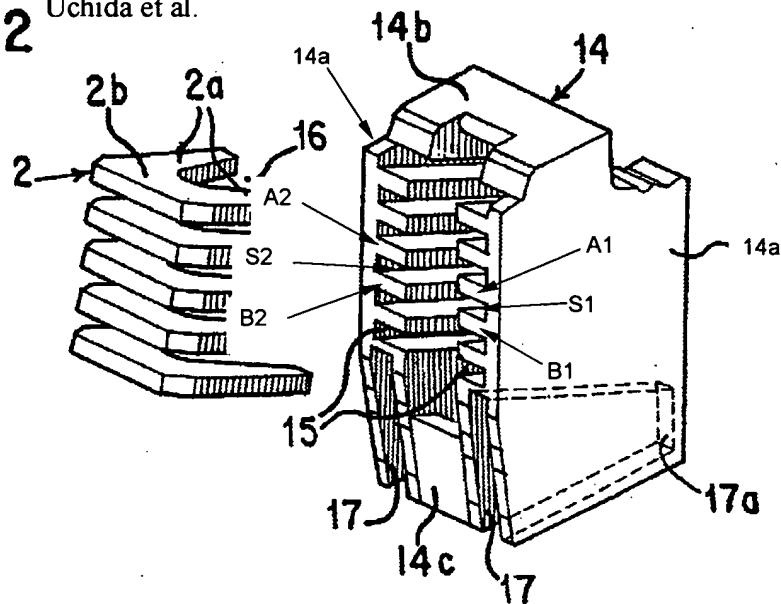
4. Claims 12 and 13 are rejected under 35 U.S.C. § 102(b) as being anticipated by Maier et al. Maier et al. disclose an apparatus for quenching an arc (22) (Fig. 2), the apparatus having an arc stack housing (46, 48, 50); an arc plate (44) (Fig. 3); and a means (49, 51) for securing the arc plate in the arc housing; the means preventing the arc plate from vibrating in the arc stack housing by providing a tight clamping of the arc plate resulting in a rugged, unitary apparatus (Maier et al.: col. 2, lines 9-16).

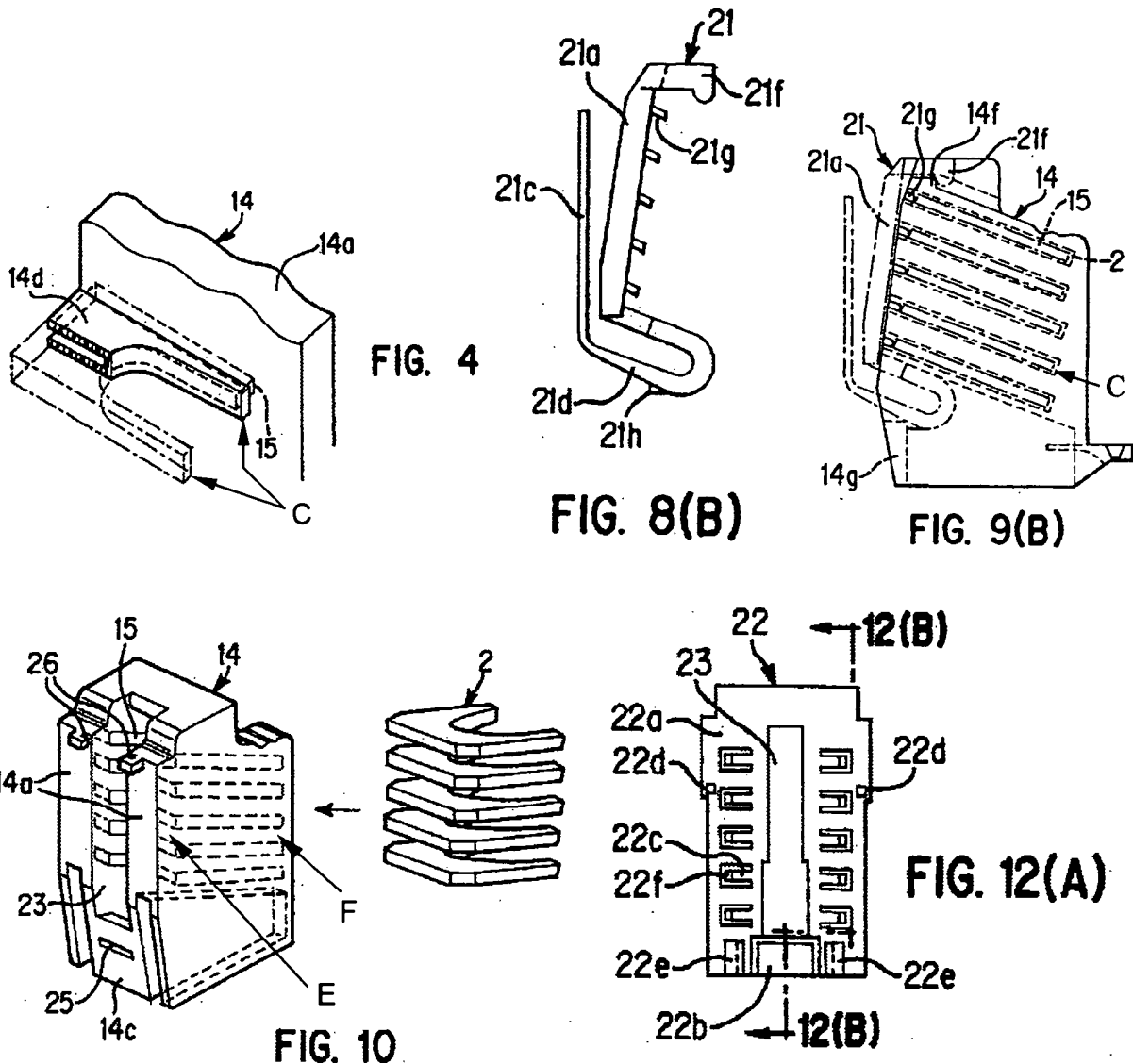
Claim Rejections - 35 USC § 103

5. Claims 1 and 2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchida et al. Uchida et al. disclose an integrally molded housing (14) (Figs. 1 and 2) for securing an arc plate (2), the arc plate including a first longitudinal edge (2a), an opposed second longitudinal edge (2a), a notched first end (16), and a second end (2b) opposed to the first end, the housing having a first support member (14a); a second support member (14a) secured in a spaced relation to the first support member; a first securing ledge (A1) protruding from the first support member and toward the second support member; the first securing ledge having a lower surface; a second securing ledge (B1) protruding from the first support member and toward the second support member and having an upper surface, the first securing ledge lower surface and the second securing ledge upper surface defining a first slot (S1) adapted to receive the first longitudinal edge of the arc plate; a third securing ledge (A2) protruding from the second support member and toward the first support member; the third securing ledge having a lower surface; a fourth

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securing ledge (B2) protruding from the second support member and toward the first support member and having an upper surface, the third securing ledge lower surface and the fourth securing ledge upper surface defining a second slot (S2) adapted to receive the second longitudinal edge of the arc plate; a stop member (C) engaging the first end of the arc plate; and a locking member (21g) (Figs. 8B and 9B) engaging the second end of the arc plates. In specific regards to claim 2, Uchida et al. further disclose an additional embodiment having resilient stop members (21c) (Figs. 12A-12D) with tabs (21f) engaging the first end of the arc plates, fixing them in place. Uchida et al. disclose the claimed invention except for the back stop being resilient. It would have been obvious to one having ordinary skill in the art at the time the invention was made to reverse the resilient nature of the back stop with that of the locking member, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167.

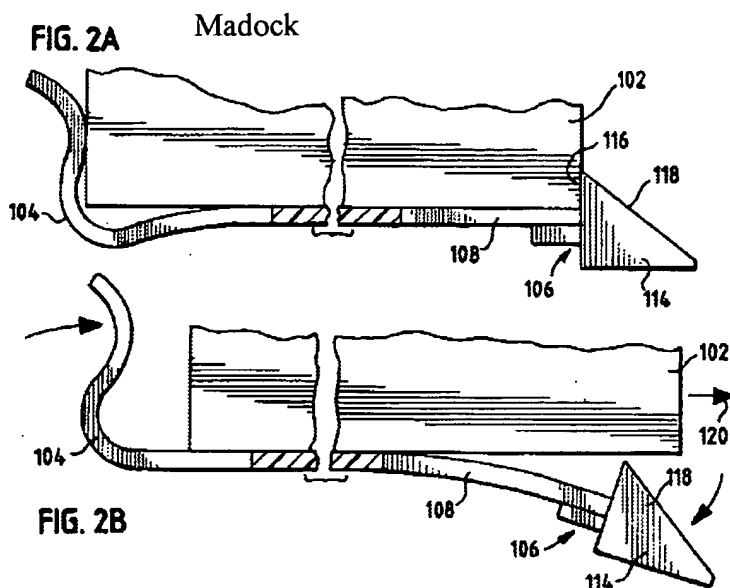
FIG. 2 Uchida et al.



6. Claims 3 and 4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchida et al., as applied to claim 1 above, and in further view of Madock. Uchida et al. disclose a housing for securing an arc plate having all the elements stated previously. Although Uchida et al. disclose an integrally molded housing, Uchida et al. do not expressly disclose an integrally molded housing for securing an arc plate wherein the locking member further having a resilient

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member having a first end fixedly attached to the first securing ledge and having a second end connected to the tab, the tab having an inside face for securing the arc plate in the housing; and wherein the first support member, the second support member, the first securing ledge, the second securing ledge, the stop member, and the locking member form an integral molded assembly. Madock teaches a housing (Figs. 1-7) capable of securing an arc plate having integrally molded supports (12) having resilient stop members (104); locking members (106) including a resilient member (108) and a tab (114), the resilient member having a first end fixedly attached to a first securing ledge (82-90) and having a second end connected to the tab, the tab having an inside face (116) for securing an arc plate in the housing. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the integrally molded supports with all of the elements taught by Madock, modifying the integrally molded housing, the stop members, the locking members and securing ledges, disclosed by Uchida et al., thus forming an integrally molded assembly consisting of support members, securing ledges, stop members and locking members, thereby substantially reducing the cost of manufacturing of the housing (Madock: col. 4, lines 31-34), as well allowing for the partial ejection of the arc plate from the housing so that it may be easily grasped by a user (Madock: col. 1, lines 39-42). In further regards to claim 4, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the apparatus and all of the elements disclosed by Uchida et al. and Madock, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).



7. Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchida et al. and Madock. Uchida et al. disclose an integrally molded housing (14) (Figs. 1 and 2) for securing an arc plate (2), the arc plate including a first longitudinal edge (2a), an opposed second longitudinal edge (2a), a notched first end (16), and a second end (2b) opposed to the first end, the housing having a first support member (14a); a second support member (14a) secured in a spaced relation to the first support member; a first securing ledge (A1) protruding from the first support member and toward the second support member; the first securing ledge having a lower surface; a second securing ledge (B1) protruding from the first support member and toward the second support member, the second securing ledge having an upper surface; the first securing ledge lower surface and the second securing ledge upper surface defining a first slot (S1) adapted to receive the first longitudinal edge of the arc plate; a third securing ledge (A2) protruding from the second support member and toward the first support member; the third securing ledge having a lower surface; a fourth securing ledge (B2) protruding from the second support member and toward the first support member, the fourth securing ledge having an upper surface; the third

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securing ledge and the fourth securing ledge defining a second slot (S2) adapted to receive the second longitudinal edge of the arc plate; a stop member (C) engaging the first end of the arc plate; and a locking member (21g) (Figs. 8B and 9B) engaging the second end of the arc plates. Uchida et al. further disclose resilient and deformable stop members (21c) (Figs. 12A-12D) with tabs (21f) extending into the first and second slots engaging the first end of the arc plates, fixing them in place. Uchida et al. do not expressly disclose a housing for securing an arc plate wherein the locking member further having a resilient member having a first end fixedly attached to the first securing ledge and having a second end connected to the tab, the tab having an inside face for contact with the arc plate. Madock teaches a housing (Figs. 1-7) capable of securing an arc plate having integrally molded supports (12) having resilient stop members (104); locking members (106) including a resilient member (108) and a tab (114), the resilient member having a first end fixedly attached to a first securing ledge (82-90) and having a second end connected to the tab, the tab having an inside face (116) in contact with an arc plate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the integrally molded supports with all of the elements taught by Madock, modifying the housing, the stop members, the locking members and securing ledges, disclosed by Uchida et al., thus forming an integrally molded assembly consisting of support members, securing ledges, stop members and locking members, thereby substantially reducing the cost of manufacturing of the housing (Madock: col. 4, lines 31-34), as well allowing for the partial ejection of the arc plate from the housing so that it may be easily grasped by a user (Madock: col. 1, lines 39-42).

8. Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchida et al., as applied to claim 6 above, and in further view of Madock. Uchida et al. disclose an

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apparatus for quenching an arc having all the elements stated previously. Uchida et al. further disclose an apparatus for quenching an arch having a back stop member (C) extending into each of the first and second slots, the back stop member engaging the arc plate; and a locking member (21g) (Figs. 8B and 9B) extending into the first and second slots engaging the second end of the arc plates, and resilient and deformable locking members (21c) (Figs. 12A-12D) with tabs (21f) extending into the first and second slots engaging the arc plates, securing them in place. Uchida et al. do not expressly disclose an apparatus for quenching an arc wherein the back stop member is resilient and deformable, the back stop member being deformed and in contact with the arc plate, whereby the back stop member forces the arc plate against the locking member; and wherein the resilient member of the locking member having a first end fixedly attached to the first securing ledge and having a second end connected to the tab, the tab having an inside face for contact with the arc plate. Madock teaches an apparatus (Figs. 1-7) capable of securing an arc plate having an integrally molded wall (12) having back stop members (104) that are resilient and deformable; the back stop member being deformed and in contact with an arc plate, whereby the back stop members force an arc plate against locking members (106); the locking members including a resilient member (108) and a tab (114), the resilient member having a first end fixedly attached to a first securing ledge (82-90) and having a second end connected to the tab, the tab having an inside face (116) in contact with an arc plate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the integrally molded wall with all of the elements taught by Madock, modifying the apparatus for quenching an arc, the walls, the back stop members, the locking members and securing ledges, disclosed by Uchida et al., thus forming an integrally molded assembly consisting of support members,

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securing ledges, back stop members and locking members, thereby substantially reducing the cost of manufacturing of the housing (Madock: col. 4, lines 31-34), as well allowing for the partial ejection of the arc plate from the housing so that it may be easily grasped by a user (Madock: col. 1, lines 39-42).

9. Claims 9 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchida et al. and Madock. Uchida et al. disclose an integrally molded apparatus for quenching an arc (14) (Figs. 1-12) having a first wall (14a); a second wall (14a) secured in spaced relation to the first wall; a first slot (S1) formed in the first wall and opening toward the second wall; a second slot (S2) formed in the second wall and opening toward the first wall; an arc plate (2) in slidable communication with the first slot and the second slot; a back stop member (C) secured in spaced relation to the first and second wall and extending into each of the first and second slots, the back stop member engaging the arc plate; and a locking member (21g) (Figs. 8B and 9B) secured in spaced relation to the first and second wall and extending into the first and second slots engaging the second end of the arc plates, and resilient and deformable locking members (21c) (Figs. 12A-12D) with tabs (21f) extending into the first and second slots engaging the arc plates, securing them in place against the back stop members. Uchida et al. do not expressly disclose an integrally molded apparatus for quenching an arc wherein the resilient member of the locking member further having a first end fixedly attached to the first securing ledge and having a second end connected to the tab, the tab having an inside face for contact with an arc plate; wherein the back stop member is resilient and deformable, the back stop member being deformed and in contact with the arc plate, whereby the back stop member pushes the arc plate towards the tab. Madock teaches an apparatus (Figs. 1-7) capable of securing an arc plate having an integrally

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molded wall (12) having locking members (106) including a resilient member (108) and a tab (114), the resilient member having a first end fixedly attached to a first securing ledge (82-90) and having a second end connected to the tab, the tab having an inside face (116) in contact with an arc plate; back stop members (104) that are resilient and deformable; the back stop member being deformed and in contact with an arc plate, whereby the back stop members push an arc plate towards the tab. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the integrally molded wall with all of the elements taught by Madock, modifying the integrally molded apparatus for quenching an arc, the walls, the stop members, the locking members and securing ledges, disclosed by Uchida et al., thus forming an integrally molded assembly consisting of walls, securing ledges, stop members and locking members, thereby substantially reducing the cost of manufacturing of the apparatus (Madock: col. 4, lines 31-34), as well allowing for the partial ejection of the arc plate from the housing so that it may be easily grasped by a user (Madock: col. 1, lines 39-42). In further regards to claim 10, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the apparatus and all of the elements disclosed by Uchida et al. and Madock, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

10. Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Uchida et al. Uchida et al. disclose an apparatus for quenching an arc (14) (Figs. 1-10), the apparatus having an arc stack housing (14) having a first member (14a) secured in spaced relation to a second member (14a), the first member and the second member defining a slot (S1, S2) having a back

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end (E) and an insertion end (F); a back stop (C) positioned at the back end; a locking member (21g, 22c) positioned at the insertion end, whereby the back stop pushes the arc plate (2) against the locking member when inserted into the slot. Uchida et al. disclose the claimed invention except for the back stop being resilient. It would have been obvious to one having ordinary skill in the art at the time the invention was made to reverse the resilient nature of the back stop with that of the locking member, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167.

Response to Arguments

11. Applicant's arguments with respect to claims 1, 6 and 11 have been considered but are moot in view of the new ground(s) of rejection.

12. In response to Applicant's argument that the Madock reference is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, particularly regarding claims 1, 5, 6, 9, 11 and 12, the applicant broadly claims either a "housing" or an "apparatus." As pointed out by the applicant, the Madock reference is classified in 312 (supports and cabinet or housing structure). Class 312 is defined, in part as: receptacles or enclosures, combined with article supporting means, fixed or movable partly or wholly out of the enclosure to make the article supported more readily accessible. Included in this class, for example, are article containing magazine type cabinet structures having means to facilitate the removal of articles therefrom.

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Clearly, a “housing” or an “apparatus” renders 312 references as analogous art. Furthermore, CDs are relatively flat and planar, similar in size and shape to arc plates, rendering a “housing” or an “apparatus” for securing CDs applicable to arc plates. Furthermore, Applicant’s argument with respect to the Madock reference having features that are not a stated objective of the applicant’s invention is irrelevant. Additional features or capabilities of the Madock teaching, in no way hinders the structure and/or the function of that structure.

13. In response to Applicant’s argument regarding claims 12 and 13, the Maier et al. reference clearly teaches the “structure” which clearly incorporates “a means” of preventing the arc plate from vibrating within the arc stack housing, which is broadly recited in the claims.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Fitzgerald whose telephone number is (703) 305-4851. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai, can be reached on (703) 308-2486. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9302 before final action, and (703) 872-9327 after final action. Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-1113.



JPF

07/11/2003

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